

memorandum

date October 8, 2009

to Chehalis River Basin Flood Authority

from Board Advisory Committee and ESA Adolfson

subject Supplemental Budget Request

At the September 17 Flood Authority work session and business meeting, the Flood Authority discussed its current budget and requested the preparation of a supplemental budget request for potential submittal to the Governor's Office. This memo summarizes these discussions and the decisions the Flood Authority made. It also details the supplemental budget request recommended by the Board Advisory Committee and ESA Adolfson.

Budget Discussion

House Bills 3374 and 3375 allocated \$2.5 million to establish a Flood Authority with basin wide representation to "...develop or participate in the development of flood hazard mitigation measures throughout the basin."

The Flood Authority, at its September 17 meeting, reviewed expenditures to date and noted that almost all the budget was spent, encumbered, or budgeted to be spent by the end of June 2010. The funds are committed for basin-wide studies and projects (including the upstream storage dam feasibility study, the analysis of Ecosystem Services, LiDAR data acquisition, the lower-basin hydraulic model, and the Early Warning Program). The funds also cover Flood Authority staffing and facilitation provided through a consultation contract with ESA Adolfson and other administration costs (salaries/wages, employee benefits, supplies, and Authority member travel).

At that time there was projected to be \$135,347.03 remaining in the budget after all funding commitments are considered.

The Flood Authority noted that some projects or studies might be accomplished under budget. On the other hand, they noted that some studies or projects might require more money than what is currently budgeted. They also discussed the fact that there could be very little budget left to continue Flood Authority operations and project administration beyond the end of the fiscal year (June 30, 2010). They also noted that they need to have funds to cover the potential formation of a flood district and participate in the Corps of Engineer's basin-wide General Investigation which is being amended to consider flood mitigation projects.

The Flood Authority decided to consider submitting a supplemental budget to the Governor's Office for additional funds for fiscal year 2010-2011. Pending the outcome of the legislative budget process, they decided to be conservative in their spending and not allocate more money for projects or studies until after June 30, 2010.

At the end of the discussion the Flood Authority directed ESA Adolfson and the Board Advisory Committee to:

[R]eview the availability of funding necessary for the Flood Authority to work past June 30, 2010. The BAC and Adolfson will present their findings to the Authority at the regular October Flood Authority meeting, including an option for a request for additional funding in the Governor's current supplemental budget.

Supplemental Budget

ESA Adolfson and the BAC recommend that the Flood Authority request \$1,593,000 in the Governor's supplemental budget. This request will cover administrative costs for the Flood Authority, including salaries and wages, employee benefits, supplies, other goods and services, and travel for Flood Authority members. It will also cover a contract for consultant services. This cost is an estimate based on the cost of continuing current tasks and adding tasks to assist the Flood Authority in setting up a Flood Control District as well as participate in the development and implementation of the basin-wide General Investigation.

A supplemental budget request, including a detailed Flood Authority scope of work with budget estimates, is attached. Table 1 is a breakdown of requested budget by current Authority budgetary categories. An additional category for Flood District formation has been added.

Table 1 – Budget Request by Authority Budget Categories

Budget Category	Current Budget Amount	Total Expended (as of August 2009)	Recommended Additional Budget Request
Salaries/Wages	\$ 40,000.00	\$ 22,389.91	\$ 25,000.00
Employee Benefits	\$ 15,000.00	\$ 5,628.62	\$ 6,000.00
Supplies	\$ 4,000.00	\$ 2,579.26	\$ 3,000.00
Other good/services	\$ 30,000.00	\$ 23,828.71	\$ 30,000.00
Consulting services	\$ 900,000.00	\$ 559,654.02	\$ 525,000.00
Studies	\$ 1,504,000.00	\$ 175,037.95	\$ 0.00
Travel-FA members	\$ 7,000.00	\$ 3,352.47	\$ 4,000.00
Flood District Formation	\$ 0.00	\$ 0.00	\$ 1,000,000.00
Total			\$ 1,593,000.00

Note:

The \$525,000 budgeted for consulting services is based on the facilitation and staff services portion of the budget for task 1 (Facilitation and Administration) as well as the requested budgets for tasks 2, 3, 5, and 6, assuming that the Flood Authority would ask its consultants to carry out those tasks. If the supplemental budget is approved, consultants would provide a more detailed scope and budget, not to exceed \$525,000, for Flood Authority approval in Spring 2010.

Next Steps

The BAC and ESA Adolfson recommend that the Flood Authority review this memo to ensure that the discussions on budget at the September 17 Flood Authority meetings have been captured accurately. We also recommend that the Flood Authority discuss the proposed supplemental budget request. Assuming that it is satisfactory, or that Authority-recommended changes will be incorporated, we recommend that the Flood Authority authorize Bruce Mackey, as the Authority's facilitator, to coordinate with the Governor's Office to make the budget request.



2010-2011 Supplemental Budget Request

Major Flooding Issues in the Basin

Flooding is a common, historical occurrence in the Chehalis River basin. Major flood events on the Chehalis River have affected Lewis, Thurston, and Grays Harbor Counties in the years 1972, 1975, 1986, 1990, 1996, 2007, and 2009. In the past 30 years Lewis County has experienced 16 federally declared disasters. Of these, 13 were either caused or exacerbated by flooding. These floods have caused millions of dollars of flood damage and the disruption of lives and commerce. The flooding closed Interstate 5 through Chehalis and Centralia for multiple days during the 1996, 2007, and 2009 floods.

Chehalis River Basin Flood Authority

The Flood Authority was formed in response to the 2007 flooding event throughout Lewis, Grays Harbor, and Thurston Counties and on the Chehalis Reservation. In April 2008, the Authority was formed by an Interlocal Agreement between eleven jurisdictions in the river basin to evaluate flooding issues throughout the basin. House Bills 3374 and 3375 appropriated \$2.5 million by the legislature for the Flood Authority to develop or participate in the development of flood hazard mitigation measures throughout the basin.

The eleven jurisdictions in the Chehalis River Basin Flood Authority are: Grays Harbor, Lewis, and Thurston Counties; the Confederated Tribes of the Chehalis; the cities of Aberdeen, Centralia, Chehalis, Montesano, and Oakville; and the towns of Bucoda and Pe Ell.

The purpose of the Flood Authority, elucidated in the Interlocal Agreement, is to develop and participate in the development of flood hazard mitigation measures throughout the basin, and provide a formal and organized process to ensure that:

- Flood control projects are identified and implemented that address the flood problems in the basin.
- Good public policy supports environmentally sensitive responses to protect communities and their residents from flooding, if the responses provide benefits which exceed costs, including costs associated with a no action response.
- State and federal funding sources are well-informed of Basin Government options and needs.

- The design for basin flood control projects incorporate options, features and betterments that may benefit the basin communities and the Basin Governments.
- The Chehalis River Basin Flood Authority will oversee moving current and future Chehalis River Basin Flood reduction projects forward until such time as a Flood Control District is formed and adopted by the stakeholders' legislative authorities.

Work to Date

Since its formation in spring 2008, the Flood Authority has undertaken several important steps towards the goal of developing a basin-wide package of actions and projects to reduce flood damage.

The Authority completed the first draft of a **basin-wide Comprehensive Flood Hazard Management Plan** in June 2009. This plan will act as a blueprint for the future. It:

- gathers information on Chehalis Basin watershed and river characteristics,
- summarizes information about flooding in the basin,
- identifies studies needed to analyze and mitigate flooding problems, and
- identifies potential projects to reduce flood damages.

A final draft plan will be completed in June of 2010. The final draft plan will include recommendations for regulatory improvements by member jurisdictions and for a governance and finance structure for implementing the plan.

The Authority is currently conducting studies and developing models to understand the impacts of different actions or projects to reduce flood damage in the basin. Some of the studies are related to specific on-the-ground projects the Authority may choose to pursue. The studies include:

- Developing a **LiDAR digital elevation model** for the entire Chehalis Basin. This data will provide consistent information to support modeling and analysis of future flood mitigation projects. The flights are scheduled for this fall.
- Developing a **hydraulic model** for the basin below Grand Mound. The model will provide consistent information for the entire basin and, in combination with the existing model for the upper basin, would be used to evaluate the benefits of flood mitigation projects. The Flood Authority is currently working with FEMA to develop this model in conjunction with their flood mapping efforts. FEMA has not indicated a completion date for that work.
- Supporting the USGS in developing a **Decision Support Tool** that will accurately predict runoff based on predicted rainfall patterns. The Decision Support Tool could be used to evaluate alternatives for flood mitigation projects in the future. USGS has not indicated completion date for that work.
- Conducting an **economic analysis** to evaluate flood protection and estimate an economic value for the many ecosystem services in the basin. This analysis will help the Flood Authority select alternatives for flood mitigation. Initial results are expected this fall and the Flood Authority will use this cutting edge analysis to

elucidate the value of many environmental benefits heretofore ignored in benefit cost analysis.

- Offered to help conduct a feasibility study of **modifications to Skookumchuck Dam** to determine if modifying the discharge pipe can allow for faster drawdown of the reservoir during flood events. This offer is under discussion with TransAlta who own and operates the dam.
- Supporting the feasibility study for upstream storage facilities being conducted by the Lewis County PUD.

The Flood Authority hired Elway Research to conduct a **public values survey** of Basin residents to find out their opinions on flooding. The survey was conducted by telephone basin-wide in March 2009, and the results of the survey have been used to help determine goals and actions for the Flood Authority.

The Authority conducted an **inventory of stream and rain gauges** in the basin last winter, working with the National Weather Service and USGS (U.S. Geologic Survey). Then the Flood Authority assisted Lewis and Thurston County in upgrading several existing stream and rain gauges. The gauge project also identified locations where additional gauges would be most helpful in the future.

Information gathered in the gauge project will be used in an **early warning system** project that the Authority is just now undertaking. Working with the emergency management staff of local jurisdictions, the Flood authority will design and implement a system to warn citizens in advance of an anticipated flood event. This system should be available for implementation before the flood season in 2011. The total cost will not be known until the report is completed because the technical sophistication needed and/or desired will drive the total funding requirements.

Currently the Flood Authority is **evaluating land use regulations across the basin**. The information catalogues current regulations in each jurisdiction and will put forward possible changes to regulations throughout the basin that would help mitigate flood damages. This report will be completed this fall and offers near term flood mitigation benefits if local jurisdictions accept the recommendations and adopt them in a timely manner.

Flood Authority Funding Does Not Cover FY 2011 Needs

The Flood Authority, at its September 17 meeting, reviewed its budget expenditures to date and noted that almost all to the budget was spent, encumbered or budgeted to be spent by the end of June 2010. The funds are committed for: basin-wide studies and projects, Flood Authority facilitation, administering contracts, and administrative costs.

There is approximately \$135,000 remaining in the budget beyond current funding commitments.

Current funding is inadequate to continue Flood Authority operations and project administration beyond the end of the fiscal year (June 30, 2010). Additional funds will be required to:

- Ensure current projects and studies identified or under contract are completed and implemented.
- Pursue the formation of a Flood Control District as specified in the Interlocal Agreement. The Flood Control District will provide governance and finance capabilities to implement the basin wide plan, and assist in funding a variety of basin wide projects to mitigate flooding impacts as well as provide technical assistance to local jurisdictions.
- Participate in the Army Corps of Engineers Basin-wide General Investigation which is being amended to consider flood mitigation projects across the basin and potentially provide federal funding for approved projects across the basin.
- Provide continued facilitation and administrative services to the Flood Authority.
- Implement the Chehalis River Basin Comprehensive Flood Hazard Management Plan.
- Help develop information and legislation regarding the formation of a multicounty Flood Control District as anticipated in the interlocal agreement and ensure that the Flood Control District has interim staff when it is formed.

Opportunity Cost of Not Funding the Flood Authority

An operational Flood Authority and the formation of a Flood Control District are essential for the successful identification and construction of any basin-wide flood hazard mitigation projects anticipated in the legislation (HB 3374 and HB 3375).

HB 3374 appropriated an additional \$47.5 million in state general obligation bonds to the Office of Financial Management for flood hazard mitigation projects for the Chehalis River basin.

However HB 3375 states, “The office of financial management shall not allot funds for construction of flood hazard mitigation projects for the Chehalis river basin until a project agreement between nonfederal project partners has been signed and copies have been provided to the governor, the majority and minority leaders of the senate, and the speaker and minority leader of the house of representatives. The project agreement must delineate responsibility for the ongoing operations and maintenance of the project. The agreement must also include a plan to meet applicable floodplain management requirements and to address any applicable federal requirements for managing the effect of future land use developments on the extent and severity of flooding.”

The continued existence of the Flood Authority is necessary for agreement of all local parties to any flood mitigation projects requiring use of the \$47.5 million allocated by the legislature. Since the \$47.5 million is intended to serve as match for one or more federal projects, the cost of not continuing the work of the Authority could be hundreds of millions in federal funds for flood mitigation projects.

The devastation experienced by the Chehalis basin citizens, towns and cities as well as the closure of I-5 will continue until a substantial mitigation project is in place.

While the loss of life and human suffering cannot be measured, the loss to homes, businesses and commerce is well documented for the major floods of 1996, 2007 and 2009. Funding the Flood Authority until an operational Flood Control District is created is crucial to help mitigate these impacts in the future.

Supplemental Budget request

After considering their needs for the 2010-2011 fiscal year, the Flood Authority is requesting a supplemental budget of \$1,593,000. These funds will cover the cost of administration and facilitation of the Flood Authority, participation in the basin-wide General Investigation, adoption of the basin-wide Comprehensive Flood Hazard Management Plan, possible formation of a Flood Control District, public involvement activities, and continued implementation of the Authority's ongoing studies and projects.

Please refer to the attached Flood Authority work plan and budget for details.

**Chehalis River Basin Flood Authority
Preliminary Scope of Work and Budget
July 2010-June 2011**

All tasks will be carried out by the Flood Authority, its members, staff of Flood Authority jurisdictions, or consultants under contract with the Flood Authority.

Task 1 – Administration and Facilitation

The Flood Authority will require funding for administrative costs (such as salaries and wages, supplies, and travel for Flood Authority members) and for a consultant to provide facilitation and staff support. This funding will pay for Flood Authority meetings, Advisory Committee meetings, representation of the Flood Authority with other governmental agencies, and support on Flood Authority decision making. The Flood Authority is charged with making decisions about projects throughout the Chehalis River Basin, including the use of \$47.5 million in state funds to use as match for federal projects. Funding for administration and facilitation will allow the Flood Authority to follow through on this responsibility.

Breakdown of administration and facilitation costs:

Category	Budget Request
Salaries/Wages	\$ 25,000.00
Employee Benefits	\$ 6,000.00
Supplies	\$ 3,000.00
Other good/services	\$ 30,000.00
Facilitation and staff support	\$ 335,000.00
Studies	\$ 0.00
Travel-FA members	\$ 4,000.00
Total	\$ 403,000.00

Request for task 1: \$403,000

Task 2 – Participate in Basin-Wide General Investigation

The Corps of Engineers is conducting a Basin-Wide General Investigation of ecosystem restoration and flood control. Grays Harbor County is acting as local sponsor on behalf of the Chehalis Basin Partnership. The Flood Authority, through an interlocal agreement, will work with Grays Harbor County to represent its interests related to flood control. Currently, the Flood Authority, its Board Advisory Committee, and its consultants are working closely with all interested parties to help develop the Project Management Plan for the General Investigation. The Flood Authority requests additional funding to ensure continued representation of the Authority's interests in the General Investigation.

Request for task 2: \$50,000

Task 3 - Flood Plan

The Flood Authority has developed a draft Comprehensive Flood Hazard Management Plan. Over the 2009-2010 fiscal year, the Authority is working with its consultants to revise and update the plan, with intentions of adopting the plan as an Authority by June 2010. The Authority will also develop an adoption process for Authority member jurisdictions by June 2010.

Request for task 3: \$50,000

Task 4 - Flood Control District Formation

The interlocal agreement establishing the Flood Authority states the Flood Authority will “create a Basin Flood Control District as soon as is practicable.” Grays Harbor, Lewis, and Thurston Counties plan to place a measure on the ballot to establish a basin-wide Flood Control District. A sustainable governance and financing structure, such as a Flood Control District, is necessary to complete and maintain the various efforts needed to protect basin citizens from flooding. The Flood Authority will support the logistical, legal, and financial work necessary to set up the District consistent with OFM Interlocal Agreement K331 between the Office of Financial Management and the Chehalis River Basin Flood Authority. No funding will be used to campaign for or against a ballot initiative creating a new flood district.

Request for task 4: \$1,000,000

Task 5 – Public Involvement

The Flood Authority has held public meetings to discuss flooding and, under its current scope of work, plans to hold additional meetings to discuss the draft Flood Plan. The Authority will continue to involve the public in its decision making through periodic public updates and through maintaining a Flood Authority website.

Request for task 5: \$50,000

Task 6 – Ripe and Ready Projects and Studies

The Flood Authority is currently pursuing a number of projects and studies (called “ripe and ready”) that they found could be quickly initiated. The projects, such as the Early Warning System and the completed Stream and Rain Gauge project, provide immediate benefits to citizens and will not preclude future actions. The studies, including the acquisition of LiDAR data, completion of a lower-basin hydraulic model, and an analysis of ecosystem services, provide data the Flood Authority and other agencies need to make

decisions about flood mitigation projects throughout the basin. The Authority will use funding to continue to oversee and manage these studies and projects.

Request for task 6: \$40,000

Overall Budget Request

Task	Requested Funding
1 – Administration & Facilitation	\$403,000
2 – General Investigation	\$50,000
3 – Flood Plan	\$50,000
4 – Flood District Formation	\$1,000,000
5 – Public Involvement	\$50,000
6 – Ripe and Ready Projects	\$40,000
Total	\$1,593,000